



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY  
A Nationally Accredited Laboratory

700 NORTH 5TH STREET  
RICHMOND, VIRGINIA 23219  
(804) 786-6971

### CERTIFICATE OF INSTRUMENT ACCURACY

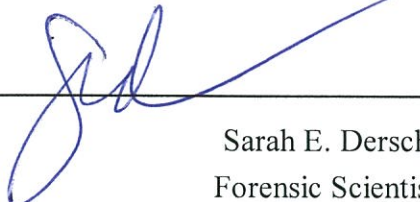
INSTRUMENT: Intox EC/IR II  
SERIAL NUMBER: 010591  
CERTIFICATION DATE: January 29, 2014  
DATE RECERTIFICATION DUE: July 28, 2014

The above listed instrument was found to meet all requirements for accuracy and performance established by the Department of Forensic Science as required by §9.1-1101 (B)(3). Measurement traceability is established through the use of reference materials supplied by an ISO/IEC 17025:2005 accredited calibration laboratory.

#### Estimation of Uncertainty of Measurement:

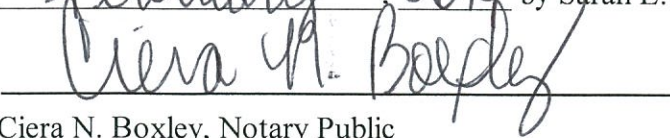
0.020 ± 0.004 g/210 L      0.150 ± 0.007 g/210 L  
0.080 ± 0.004 g/210 L      0.250 ± 0.007 g/210 L

The Uncertainty of Measurement is reported at the 99.73% level of confidence and a coverage factor of k=3. The estimation of the Uncertainty of Measurement is calculated for the Certification process only.

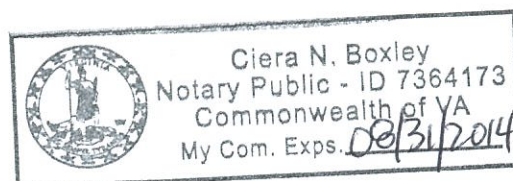
  
\_\_\_\_\_  
Sarah E. Dersch  
Forensic Scientist

CITY OF RICHMOND  
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 16th day of February 2014 by Sarah E. Dersch

  
Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014





sd

**Department of Forensic Science**  
**Breath Alcohol Section**  
**Instrument Maintenance History**  
**1/1/1990 To 2/4/2014**

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**Instrument Serial Number:** 010591 **As of 04-Feb-14**

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<b>Maintenance</b>	<b>Certification</b>	<b>Technician</b>	
<b>Date</b>	<b>Date</b>	<b>Initials</b>	<b>Remarks</b>
29-Jan-14	29-Jan-14	SED (24178)	CERTIFIED.
15-Aug-13	15-Aug-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
26-Feb-13	26-Feb-13	TLN (25387)	CERTIFIED
06-Sep-12	06-Sep-12	HMS (18910)	CERTIFIED, REPLACED DRY GAS STANDARD.
21-Mar-12	21-Mar-12	HMS (18910)	CERTIFIED, REPLACED DRY GAS STANDARD.
13-Oct-11	13-Oct-11	HMS (18910)	CALIBRATED AND CERTIFIED.
22-Jan-10	22-Jan-10	DBH (21250)	RESEATED U26, CERTIFIED
04-Aug-09	04-Aug-09	RJP (22428)	CERTIFIED. REPLACED DRY GAS STANDARD.
14-Apr-09	14-Apr-09	RJP (22428)	CERTIFIED.
19-Mar-09	19-Mar-09	NMJ (22392)	FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.
04-Feb-09	04-Feb-09	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

*fid*

# INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number 010591 Worksheet Start Date 1/29/2014  
Location Loudoun Co Eastern  
Address 46620 E Frederick Dr, Sterling, Va 20164  
DFS Technician Sarah Dersch License No. 24178

☐ Laboratory ☒ On-Site

Site Specification: No detrimental environmental conditions exist. ☒

Instrument Barometer (mm HG) 761 Reference Barometer (mm HG) 762  
Reference Barometer(RB)Serial # 009111 RB Calibration Due 5/23/2014

## Measurement Assurance Check

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.303
0.300	0.300	0.291	0.309	Sample 2	0.303
Precision		sample min	sample max	Sample 3	0.302
0.001		0.302	0.303		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.101
0.100	0.100	0.097	0.103	Sample 2	0.101
Precision		sample min	sample max	Sample 3	0.101
0		0.101	0.101		

Dry gas standard Lot No. (with tank no.) AG227501-24

☐ Replaced dry gas standard (+O-ring)

☐ Installed at Location

☐ Removed to DFS-Central

Supplies

Mouthpieces

Certificates of Analysis

Operator Worksheet

Other:

50

50

50

Notes:

Instrument Serial Number

010591

Certification Date

1/29/2014

☐ Calibrated☒ Certified☒ Measurement Assurance Check☒ Instrument Test☐ Troubleshooting/Maintenance Worksheet Completed

(Successful completion denotes satisfactory condition of the item.)

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.251
0.250	0.250	0.242	0.257	Sample 2	0.251
Precision		sample min	sample max	Sample 3	0.251
0		0.251	0.251		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.150
0.150	0.150	0.145	0.154	Sample 2	0.150
Precision		sample min	sample max	Sample 3	0.150
0		0.150	0.150		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.080
0.080	0.080	0.077	0.083	Sample 2	0.080
Precision		sample min	sample max	Sample 3	0.081
0.001		0.080	0.081		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.020
0.020	0.020	0.017	0.023	Sample 2	0.020
Precision		sample min	sample max	Sample 3	0.020
0		0.020	0.020		

All measurements are in g/210L

Estimation of Uncertainty of Measurement and traceability records are located within the Breath Alcohol Section

DFS Technician

Date

2/4/14

Issuing Analyst

Date

2/4/14

msk

**Intox EC/IR-II: Certification**

*sed*

*Department of Forensic Science*

Serial Number: 010591      Test Number: 841

Test Date: 01/29/2014      Test Time: 10:36 EST

Technician Initials: *SED*

Dry Gas Target: 0.250

Lot Number: 0651225015-02      Exp Date: 04/01/2014

Tank Pressure: 384 psi      Barometric Pressure: 761 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	10:36
BLK	0.000	10:37
CHK	0.251	10:38
BLK	0.000	10:39
CHK	0.251	10:40
BLK	0.000	10:42
CHK	0.251	10:43
BLK	0.000	10:45

**Success**

Standard Value (at sea level): 0.250 g/210L

Certification Status: Continued

**Intox EC/IR-II: Certification**

*SED*

*Department of Forensic Science*

Serial Number: 010591      Test Number: 842

Test Date: 01/29/2014      Test Time: 10:46 EST

Technician Initials: *SED*

Dry Gas Target: 0.150

Lot Number: 06512150I4-04      Exp Date: 04/01/2014

Tank Pressure: 850 psi      Barometric Pressure: 761 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	10:47
BLK	0.000	10:47
CHK	0.150	10:48
BLK	0.000	10:50
CHK	0.150	10:50
BLK	0.000	10:52
CHK	0.150	10:53
BLK	0.000	10:54

**Success**

Standard Value (at sea level): 0.150 g/210L

Certification Status: Continued

SED

**Intox EC/IR-II: Certification**

*Department of Forensic Science*

Serial Number: 010591      Test Number: 843  
Test Date: 01/29/2014      Test Time: 10:57 EST

Technician Initials: SED

Dry Gas Target: 0.080

Lot Number: 0651208012-01      Exp Date: 04/01/2014

Tank Pressure: 977 psi      Barometric Pressure: 761 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	10:58
BLK	0.000	10:58
CHK	0.080	10:59
BLK	0.000	11:01
CHK	0.080	11:01
BLK	0.000	11:03
CHK	0.081	11:04
BLK	0.000	11:05

**Success**

Standard Value (at sea level): 0.080 g/210L

Certification Status: Continued

**Intox EC/IR-II: Certification**

sd

*Department of Forensic Science*

Serial Number: 010591      Test Number: 844  
Test Date: 01/29/2014      Test Time: 11:07 EST

Technician Initials: SED

Dry Gas Target: 0.020

Lot Number: 0651202011-07      Exp Date: 04/01/2014

Tank Pressure: 90 psi      Barometric Pressure: 761 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	11:07
BLK	0.000	11:08
CHK	0.020	11:09
BLK	0.000	11:10
CHK	0.020	11:11
BLK	0.000	11:12
CHK	0.020	11:13
BLK	0.000	11:14

**Success**

Standard Value (at sea level): 0.020 g/210L

Certification Status: Success



*Sid*

**Intox EC/IR-II: Accuracy Check**

*Department of Forensic Science*

Serial Number: 010591      Test Number: 845

Test Date: 01/29/2014      Test Time: 11:20 EST

Dry Gas Target: 0.300

Lot Number: AG321804-04      Exp Date: 08/06/2015

Tank Pressure: 424 psi      Barometric Pressure: 761 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	11:22
CHK	0.303	11:22
BLK	0.000	11:24
CHK	0.303	11:25
BLK	0.000	11:27
CHK	0.302	11:28

Test Status: *Success*

Calibration CRC: FA805C68

**Intox EC/IR-II: Accuracy Check**

*sid*

*Department of Forensic Science*

Serial Number: 010591      Test Number: 846

Test Date: 01/29/2014      Test Time: 11:31 EST

Dry Gas Target: 0.100

Lot Number: AG227501-24      Exp Date: 10/01/2014

Tank Pressure: 325 psi      Barometric Pressure: 761 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	11:32
CHK	0.101	11:33
BLK	0.000	11:35
CHK	0.101	11:36
BLK	0.000	11:37
CHK	0.101	11:38

Test Status: *Success*

Calibration CRC: FA805C68

*Ed*




COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF FORENSIC SCIENCE

CERTIFICATE OF BLOOD ALCOHOL ANALYSIS  
AS DETERMINED BY A CHEMICAL TEST OF THE ACCUSED'S BREATH

NAME OF ACCUSED <b>INSTRUMENT, TEST,</b>	NAME OF COURT <b>DFS</b>
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BREATH ANALYSIS

SAMPLE EXAMINED AND TEST CONDUCTED BY <b>DERSCH, SARAH, E</b>		AGENCY <b>DFS Central Lab</b>
DFS LICENSE NUMBER <b>24178</b>	LICENSE EXPIRES <b>10/01/2014</b>	DATE TEST CONDUCTED <b>01/29/2014</b>
TEST EQUIPMENT NUMBER <b>010591</b>		

RESULTS: TIME SAMPLE TAKEN 11:46 EST

SAMPLE'S ALCOHOL CONTENT 0.00 GRAMS PER 210 LITERS OF BREATH

ATTEST:

I CERTIFY THAT THE ABOVE IS AN ACCURATE RECORD OF THE TEST CONDUCTED; THAT THE TEST WAS CONDUCTED WITH THE TYPE OF EQUIPMENT AND IN ACCORDANCE WITH THE METHODS APPROVED BY THE DEPARTMENT OF FORENSIC SCIENCE; THAT THE TEST WAS CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S SPECIFICATIONS; THAT PRIOR TO ADMINISTRATION OF THE TEST THE ACCUSED WAS ADVISED OF HIS RIGHT TO OBSERVE THE PROCESS AND SEE THE BLOOD ALCOHOL READING ON THE EQUIPMENT USED TO PERFORM THE BREATH TEST, AND THAT I POSSESS A VALID LICENSE TO CONDUCT SUCH TEST, GIVEN UNDER MY HAND THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_\_.

BREATH TEST OPERATOR
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☐ I HAVE RECEIVED A COPY OF THIS CERTIFICATE OF ANALYSIS \_\_\_\_\_  
SUBJECT'S SIGNATURE

☐ SUBJECT REFUSED TO SIGN FOR COPY OF CERTIFICATE OF ANALYSIS \_\_\_\_\_  
OPERATOR'S SIGNATURE